

Ecologically Significant Wetlands in the North Fork Flathead River Watershed

Prepared for the
Montana Department of
Environmental Quality

by
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■ Executive Summary

The Montana Natural Heritage Program (MTNHP), in partnership with the Montana Department of Environmental Quality, has completed an inventory to identify, document and evaluate the diversity, integrity and significance of wetlands in the North Fork Flathead River watershed in northwestern Montana. This work builds on previous watershed inventories and creates a consistent and comprehensive source of wetland information forming a basis for effectively prioritizing wetlands for protection, mitigation and restoration.

Twenty-four significant wetlands were identified and inventoried in 1999. Initial wetland selection criteria were the absence of significant hydrological modification and the presence of intact representative native plant communities, outstanding wildlife values or rare plant and animal species. Important sources for locating significant wetlands were local expert opinion, National Wetland Inventory maps and aerial photographs. We gave lower perennial riverine and depressional wetlands on private lands greater attention because of the potential for development. Wetlands were inventoried using standard heritage program methodology to assess site condition, catalog community types and document rare plant and animal occurrences. The inventoried areas are summarized in ten wetland site descriptions. At two sites, clusters of separate wetlands were grouped into wetland complexes for reporting purposes. Each site was evaluated for significance using the following factors: presence of rare plant or animal species or uncommon natural vegetation types, the diversity of vegetation types, the condition or functional integrity of the wetland, the landscape context and the size of the wetland.

The North Fork has abundant wetland and riparian habitat and stands out as having the least impacted wetland and riparian systems among the Flathead River watersheds that have been inventoried by the MTNHP to date. Riverine and depres-

sional wetlands are the most widespread wetland types due to previous glaciation, high precipitation and the development of floodplain landforms along the river corridor. These systems are important for two threatened species, grizzly bear (*Ursus arctos horribilis*) and a resident population of bull trout (*Salvelinus confluentus*).

Tepee Lake Complex, Mud Lake Complex and Hay Creek-North Fork Floodplain wetlands represent the most ecologically significant sites inventoried in the North Fork. These sites contain a complex of physical features which contribute to an outstanding diversity of plant communities that are in excellent condition. We documented a sizeable uncommon peatland community dominated by mud sedge (*Carex limosa*) and excellent examples of a common carr type, Drummond's willow / beaked sedge (*Salix drummondiana* / *Carex utriculata*) Shrubland. Rare plant species found at these sites include Hudson's Bay bulrush (*Scirpus hudsonianus*), English sundew (*Drosera anglica*) and slender cottongrass (*Eriophorum gracile*). Three rare mosses were also documented. Schnaus Creek, Coal Creek-North Fork Floodplain and Coal Creek Complex have very high significance due to their large size and high diversity of wetland habitats which include black cottonwood (*Populus balsamifera* spp. *trichocarpa*) forest communities along terraces and floodplains adjacent to the river. Nearby land use activities and presence of noxious weeds at two of these sites reduce the significance ranks from outstanding to a rank of very high significance. The remaining four sites are ranked as highly significant or moderately significant. These sites are all in excellent condition and have no noxious weeds. Abbotts Flat, Hay Creek Fen and Red Meadow Lake are smaller in size with fewer wetland features. The wetlands at Cyclone Lake consist of a narrow fringe around the perimeter of the lake. In all four of these sites, the lack of diverse wetland features result in a less diverse biotic environment and influence the overall significance rank.

Wetlands in the North Fork are threatened by increased recreational and housing development, incompatible land use activities and the spread of noxious weeds. Fortunately many opportunities exist to conserve and protect wetlands in the watershed. Leaving larger timber harvest buffers around wetlands and following best management practice guidelines could mitigate hydrologic changes and reduce potential inputs of sediments. Control of noxious weeds and prevention of new infestations would protect the integrity of the natural plant communities. Since these important sites are under mixed ownership, conservation will require collaborative efforts between private parties, land trusts and public agencies.

This project completes our first wetland inventory in the North Fork watershed. Although the project is meant to be comprehensive, there are a number of wetlands in the watershed that were not surveyed as part of this inventory project. Since we focused, where possible, on large, fairly discrete wetlands, some types of wetlands, especially small seeps and springs were under-emphasized during the inventory. We did not inventory private property without permission, nor did we consider significant wetlands inside Glacier National Park as these wetlands are already in highly protected status. As opportunities present themselves or as resources become available, additional inventory may be warranted.